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ABSTRACT

This essay contends that the school as a social institution must be challenged to initiate or strengthen instruction on human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), as school instruction is potentially one of the most effective and efficient means for achieving a reduction in the rate of future HIV infection. The essay provides a brief overview of statistics and other demographic information. Projections of the Centers for Disease Control and Prevention for HIV prevalence and the number of AIDS cases sets a realistic context for understanding the severity and scope of the problem. Institutional factors in general school health programs and HIV education in particular are presented as influences on the provision of school-based education. The critical need for HIV/AIDS education is presented through an examination of recent data on adolescent sexual activity and risk-taking behavior and a summary of the current status of HIV/AIDS education. Necessary components in effective school-based HIV/AIDS education are discussed. (Contains 21 references.) (JDD)

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The School and HIV Education after the First Decade of AIDS

Since acquired immunodeficiency syndrome (AIDS) was identified in June of 1981, over 388,000 cases had been reported through June 1994. Of those individuals over 240,000 (61%) have died (Centers for Disease Control 1994a). Within eight years AIDS became the sixth leading cause of death for persons aged 15-24, and individuals 20-29 years of age now account for almost 20% of all cases reported. With an incubation period of as many as eight to ten years for the human immunodeficiency virus (HIV), many of those persons were infected as adolescents (Centers for Disease Control 1990, 1991b, 1994a).

Behind these statistics are real human beings whose lives are filled not only with pain but also with subsequent social and economic indignities, and whose deaths will come much too soon. From the inception of the HIV/AIDS epidemic no one has been immune to its effects. But, as a society we seem to be profoundly unable to identify with the majority of people living with HIV--they are faceless, distant, unreal. Their plight is typically overshadowed by their identification with communities which have been pushed to the fringe of society.

As a primary social institution, the school can neither afford to ignore the increasing complexity of HIV/AIDS nor underestimate the impact on the adolescent population. Compared with 1992, during 1993 the number of AIDS cases associated with heterosexual contact with a partner with HIV infection or AIDS whose risk was unknown increased 195%. Altogether, the number of reported AIDS cases in the United States in 1993 increased by

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111% over 1992 (Centers for Disease Control 1994b).

HIV/AIDS education, as a component of a comprehensive school health program, is important for all students and critical for those in middle/junior high school and up. However, the stigma associated with HIV/AIDS continues to be a major impediment, even in districts with HIV education in place, and strong opposition to realistic and meaningful HIV/AIDS education continues. In the meantime, data indicate that, though most students know how HIV infection is transmitted, a substantial number still have erroneous beliefs about HIV and AIDS. While knowledge is not sufficient for a change in behavior, it is necessary.

Fundamentally, I want to contend that, given a number of factors, the school as a social institution must be challenged to initiate or strengthen and expand HIV/AIDS instruction. I realize the inherent difficulty of adding yet another responsibility to an over-burdened enterprise. Nonetheless, school instruction remains as potentially one of the most effective and efficient means for achieving a reduction in the rate of future HIV infection. AIDS is a problem with major social and economic implications for all students, and for all of society.

This essay will proceed in the following manner. First, I will provide a brief overview of statistics and other demographic information pertinent to my purpose. Knowledge of the Centers for Disease Control and Prevention (CDC) projections for HIV prevalence and the number of AIDS cases sets a realistic context for understanding the severity and scope of the problem. Next, and also briefly, certain institutional factors in general school health programs and HIV education in particular will be presented

as influences on the provision of school-based education. Third, I will present the critical need for HIV/AIDS education through an examination of recent data on adolescent sexual activity and risk-taking behavior, and by summarizing the current status of HIV/AIDS education. Last, some preliminary remarks regarding the establishment of and necessary components in effective school-based HIV/AIDS education will be advanced.

HIV/AIDS after the First Decade

During the 1980s, the number of diagnosed AIDS cases increased each year. While homosexual/bisexual men and intravenous (IV) drug users accounted for the largest number of cases throughout the decade, reported AIDS cases associated with heterosexual transmission of HIV have been increasing steadily (Centers for Disease Control 1991a). Unfortunately, American society was receptive to identifying HIV infection as a "gay disease," the consequence of which was a lack of social concern and concerted attention.

By 1990, the epidemiology of AIDS indicated that the number of cases reported per 100,000 population was higher for men, with homosexual/bisexual men and IV drug users continuing to constitute the largest category in absolute numbers. But, the comparison of AIDS cases in 1989 and 1990 began to reveal the dynamics of HIV infection. The largest proportionate increases were occurring among women (33.2%), blacks (27.6%), Hispanics (25.6%), persons living in the South (30.2%), and persons exposed to HIV through heterosexual contact (40.3%) (Centers for Disease Control 1991a). The AIDS epidemic has since expanded in scope and magnitude as HIV infection has affected different

populations. Out of shear self-interest, and for more morally-valid reasons, it was clearly a mistake for the so-called "mainstream" population to dismiss the impact of HIV/AIDS.

HIV prevalence estimates are a difficult matter, and even the most commonly and reliable methods employed by the CDC cannot fully detect the most recent changes in HIV incidence. Nonetheless, the estimated prevalence of HIV infection in the U.S. population is an important and useful measure of the extent of the nation's HIV-related problem. The most recent U.S. Public Health Service estimate is that approximately one million persons in the United States are infected with HIV, with a plausible range of 800,000-1,200,000 (Centers for Disease Control 1992d).

Surveillance for AIDS is the basis for monitoring severe HIV-related disease in the United States and for projecting trends in morbidity and mortality due to HIV infection. Such AIDS surveillance data were used by the CDC to project the number of persons who will be diagnosed with AIDS during the period 1992-1994. Overall, according to these projections, the annual number of persons diagnosed with AIDS will continue to grow in the U.S., though incidence increases will slow. The results from the models used for estimation project a wide range of possible AIDS incidence in 1994, from 43,000 to 93,000 new cases diagnosed. Using 1989 figures as a baseline, this range represents a rate of change from minus 10% to plus 94%, with a mid-point of 42% (Centers for Disease Control 1992d).

With respect to mode of HIV transmission, projections for the same period suggest qualitatively different trends for different groups, with one significant difference being that between the

rates of increase for homosexual/bisexual and heterosexual transmission. In both cases, there is again a range of projected AIDS incidence in 1994, with the estimated rates of change from 1989 at minus 20% to plus 75% and plus 119% to plus 393% respectively (Centers for Disease Control 1992d). Though the wide range in projections reflects uncertainty in knowledge about the number of persons who have been infected by HIV, when they were infected, and the number who receive therapy before developing AIDS, the CDC is clear in stating that the annual number of AIDS cases among persons with HIV infection attributed to heterosexual transmission is very likely to continue increasing.

Last, AIDS cares no more for race, ethnicity, or gender than it does for sexual orientation. The following ranges of rates of change in projected AIDS incidence are, as above, based on 1989 figures: Whites, minus 23% to plus 70%; Blacks, plus 5% to plus 131%; Hispanics, 0% to plus 122%; Males, minus 17% to plus 86%; Females, plus 25% to plus 186% (Centers for Disease Control 1992d).

For the schools (and for all of society for that matter), relying on the number of AIDS cases in the categories of age and mode of transmission in order to formulate school (and public) health policy seriously underestimates the threat HIV infection poses for adolescents. Due to the lengthy latency period, it is unlikely AIDS rates among those aged 10-19 would ever demonstrate a sharp increase even with an increase in HIV infection rates. An increase in HIV infection among adolescents would more likely result in a greater number of diagnosed AIDS cases among those

20-29 years of age. Admittedly, the past decade has seen an acceleration in attention and activity related to comprehensive school health programs which include forms of HIV/AIDS education. But, there are certain institutional and attitudinal factors which can function to either facilitate or impede these efforts.

Factors in General School Health and HIV Education

Though time has witnessed an increase in attention paid to school health and proponents have achieved a degree of success, resistance has also been a hallmark of past, and certainly more recent, experience. Consider only four negative factors cited by John M. Andress (1918:19-25) for impeding the implementation of general school health programs:

> 1)The American people do not yet seriously appreciate the fundamental importance of health for happy and successful living nor the fact that health within certain limits is to be gained by the proper expenditure of money and by education. 2)The school itself...has little appreciation of the fundamental importance of health instruction. 3)The teachers as a class have not been properly trained to teach [health]. 4)[Health] has preached too much and referred too little to facts.

These observations were published in 1918; yet, these impediments persist over seventy-five years later. While specific health concerns have obviously changed, the formulation and implementation of realistic and meaningful general school health programs are still influenced by related institutional and attitudinal factors. In a very real sense, these factors affect

as well, then, the possibility and nature of school-based HIV/AIDS education.

As the first of these factors, policy is perhaps best described as often schizophrenic, characterized by continuing tensions between comprehensive and categorical approaches. The National Health Promotion and Disease Prevention Objectives for the Year 2000 include more than 100 specific objectives related to school-age youth, most of which emphasize education in categorical areas but as a part of a comprehensive school health program. One objective in particular is a proposal to "Increase to at least 75 percent the proportion of the Nations' elementary and secondary schools that provide planned and sequential kindergarten through 12th grade quality school health education" (United States Department of Health and Human Services 1990: Objective 8.4).

The six National Education Goals urge that drug and alcohol curriculum should be taught as an integral part of comprehensive health education (National Education Goals Panel 1991). Federal regulations require that, to be eligible for any federal financial assistance, all elementary and secondary schools implement explicit drug policies and provide drug and alcohol education programs for all students. But, in both of these cases, achieving the stated aims is complicated by the fact that almost 100 different school health promotion and education programs are administered by seven different federal departments and two independent agencies (Cohen 1992). Too often, because of a lack of coordination, it is virtually impossible to avoid duplication and conflict, and tensions continue as most programs

were initiated and funded as categorical interests and thus resistant to "sharing turf."

What is true at the federal level is equally true at state and local levels of policy. While many states have strengthened their health education regulations, variations exist with respect to curriculum content, grade levels, funding, and enforcement. At the local level, health education competes against the "real stuff" of schooling for time and resources. Given policy inconsistencies at the federal and state levels, the existence of coherent programs at the local level would be somewhat of a surprise.

A second factor relates to preparation of those engaged in providing health education to students. Assuming the formulation of a coherent policy, lack of appropriate preparation of educators responsible for implementing health education emerges as a major obstacle to effectiveness. Knowledge in health education is neither routinely required in preservice teacher education programs, nor is it generally required for certification. Health education at the elementary level, if taught at all, is typically the responsibility of the classroom teacher; at the secondary level, health may be taught by those in science, physical education, or some other subject area. In any event, many teachers are uncomfortable with certain areas of the curriculum, or are inadequately prepared to teach it, let alone respond to the personal health concerns of students. While often neglected, inservive training has been shown to be a critical element in educational effectiveness (Lavin 1993).

Parent and community involvement is a third factor affecting

school health programs since parent and community groups can serve as supporters or as critics of school health programs. Just the idea of sex education, for example, elicits a degree of concern, even before any discussion of content or approach. Over the past decade, much of this concern has evolved into strong opposition to frank sexuality and HIV/AIDS education. A number of national organizations have confronted school boards on this issue, demanding use of an abstinence-only curriculum.

While not an exhaustive listing, the above three factors not only influence general school health programs but, as a part of such programs, HIV/AIDS education as well. The result can be special difficulty in implementing meaningful HIV/AIDS instruction based on the operative principle that individuals have the ability to eliminate or greatly reduce the risk of HIV infection. AIDS is a behavior-bound syndrome. Thus, to be effective, education must lead to changes in behavior that eliminate or substantially reduce the risk of infection. But, there are also obstacles which specifically impede effective HIV/AIDS education and which stand in the way of necessary behavior change.

We must acknowledge, first, that sexual practice is a biologically-based, socially-complex behavior. It derives from biological impulse hard to resist; sexual attractiveness is a prominent standard in our youth-oriented culture. The combined consequence is often sexual activity that is spontaneous, taking place when judgment is clouded by alcohol consumption or drug use. Condoms may be regarded as embarrassing, as reducing pleasure, or as inappropriate. This undermines efforts to change

the most important behaviors which permit HIV transmission.

Second, there continues to be essential disagreement about the appropriateness of certain educational messages employed to prevent HIV infection. Witness the fact that three major television networks still refuse in 1994 to broadcast advertisements for condoms [though they do carry public service announcements advocating condom use]. HIV/AIDS exposes deep-seated fears and inhibitions in American society, and as a result what is fundamentally a social and public health issue has become a religious issue. Or, more to the point, society has permitted it to become so. For some, the only acceptable change is to have people abandon altogether certain activity. From this point of view, it is wrong to engage in any sexual relations outside of socially-sanctioned, legal marriage; thus, it is consequently wrong to discuss anything (e.g., condoms) that might have even the appearance of condoning such activity. Others adopt the view that certain behaviors have occurred and will occur, and must be modified to make them safer. Since a major social commitment is necessary for a successful education effort, these philosophical differences must be confronted.

Last, it seems that the degree of risk of HIV infection for "mainstream" Americans is still a matter of debate. That is, because of the identification of AIDS during the formative period of the epidemic as a "gay disease," the heterosexual population as a group still does not consider itself at-risk. But HIV/AIDS is still in a relatively early stage of its history, and the possibility of HIV infection more widely-spread is high enough to make it prudent to act accordingly. Such action is especially

critical given the degree and nature of adolescent sexual behavior coupled with inadequate HIV/AIDS education.

The Need for HIV/AIDS Education

There is a compelling need for school-based HIV/AIDS education. Approximately 20% of all AIDS cases have been diagnosed in males, 13-29 years of age; 25% in females 13-29 (DiClemente 1992). During 1993, persons aged 13-29 accounted for 27% of heterosexual-contact AIDS cases and all cases among those aged 20-24 increased 133% over 1992 (Centers for Disease Control 1994b).

One indication of the potential for HIV infection among adolescents is the rate of infection from sexually transmitted diseases (STDs). Overall, 86% of all STDs occur among persons aged 15-29, and STDs among adolescents in particular show age-specific rates higher than for any other age group (Centers for Disease Control 1992a; Newcomer and Baldwin 1992). Further, the American Social Health Association (1989) has stated that adolescents are especially affected by STDs. Every year 2.5 million adolescents contract an STD--about one of every six. In fact, during the 1980s the highest rates for some STDs in the United States were among adolescents, particularly low-income, urban adolescents. Sexually active adolescent women are hit especially hard. HIV is a sexually transmitted disease.

Regardless of a sustained interest in abstinence-based sex education programs for youth and despite the dismay of abstinence advocates, teenage sexual activity continues to persist. The national school-based Youth Risk Behavior Survey periodically measures for the CDC the prevalence of health-risk behaviors

among adolescents through comparable national, state, and local surveys. In response to the question asking whether they had ever had sexual intercourse, over 54% of all highschool students surveyed responded in the affirmative (Centers for Disease Control 1992a).

Age is clearly the single most important predictor of sexual initiation with the percentages of 9th, 10th, 11th, and 12th graders reporting past sexual intercourse at 39.6, 47.6, 57.3, and 71.9 respectively. This data also indicated that male students were significantly more likely than female students to ever have had sexual intercourse (60.8% and 48.0% respectively); black students significantly more likely than white or Hispanic students (72.3%, 51.6%, and 53.4% respectively). Moreover, while the median age of reported first intercourse for male and female students was 16.1 and 16.9 years respectively, 33.5% of male and 20% of female students initiated sexual intercourse prior to age 15 (Centers for Disease Control 1992a,b).

There are two compounding factors identified in this data. First, of all students responding anonymously, 19% reported having had four or more sex partners during their lifetime. Male students (26.7%) were much more likely than females (11.8%) to have had four or more sex partners; blacks (37.8%) were significantly more likely than both whites (15.8%) and Hispanics (16.5%). Also, the percentage of students so reporting increased markedly by grade from 9th (12.4%) to 12th (28.6%) (Centers for Disease Control 1992b).

The second compounding factor is especially distressing. Students who had four or more sex partners were significantly

less likely to have used a condom at last sexual intercourse. Overall, 45% of currently sexually active highschool students reported condom use. In other words, over half of the sexually active students did not use a condom at their last sexual intercourse. Disturbingly, as the number of students reporting four or more lifetime partners increased, the reported use of condoms decreased. Females were less likely than males (40.0%, 49.4%) to report condom use at last sexual intercourse; Hispanics (38.4%) less likely than either whites or blacks (45.9%, 47.1%) (Centers for Disease Control 1992b).

These data indicate that a substantial proportion of adolescents engage in behaviors that clearly place them at risk for HIV infection. While the most effective means of preventing infection is indeed refraining from sexual intercourse, the fact of the matter is that a large number of teenagers have not, are not, and probably will not. These findings must be viewed, then, in the context of the current status of school-based HIV/AIDS education.

While a median of 62% of students report having been taught about HIV or AIDS, and in spite of a dramatic increase in the percentage of students receiving HIV school instruction, HIV-related knowledge and behaviors continue as causes for concern throughout the United States (Centers for Disease Control 1990, 1992c). Reduction of risk will require the implementation of grade-appropriate HIV/AIDS education as part of kindergarten through 12th grade comprehensive school health education, especially for junior and senior high students, through coordinated school and community efforts.

Again, while increased knowledge is not sufficient to guarantee behavior change, the results from a CDC anonymous and self-administered questionnaire show that it is a necessary starting point. In assessing HIV-related knowledge and beliefs, the CDC found varying proportions of students who knew that HIV infection cannot be transmitted by: blood donation (median 58%), mosquito or other insect bites (median 48%), use of public toilets (median 73%). Most students did know that HIV can be transmitted by having sexual intercourse without using a condom (median 88%) (Centers for Disease Control 1990). In all cases, however, the range of correct responses was extensive.

To determine the extent of HIV education policies and practices at the school district level, the National School Boards Association and the American Association of School Administrators, in conjunction with the CDC, conducted a survey among a national probability sample of school districts in 1990. Overall, it was discovered was that, while most of the nation's school districts require HIV education, at least one-third do not (Holtzman et. al. 1992). Three pertinent areas of findings from this survey are summarized here.

First, although HIV education was required by about two-thirds of school districts, the percentages that required instruction by grade level increased from just over 30% in first grade reaching a high of just over 80% in 7th grade. Then, by 12th grade the percentage progressively declined to approximately 37%. The drop in requirements for HIV (and health) education after 10th grade is especially striking. Given the earlier

statistics regarding adolescent sexual behavior, it should be obvious that "when students are most likely to engage in risk behaviors, HIV (and health) education are least likely to be required" (Holtzman et. al. 1992:427).

This situation causes greater alarm when coupled with the fact that specific topics pertinent to reducing the risk of HIV infection were more likely to be addressed at the upper grades. Thus, the second area of concern is the HIV education curriculum itself. Skills to avoid sexual intercourse and ways to express sexual feelings other than sexual intercourse were typically not addressed until after 6th grade. Especially disturbing is the fact that skills related to condom use generally were not included until high school and, even then, fewer than half (48.2%) of the districts reported this subject was addressed in grades 9-12. A large number of districts are not addressing critical risk reduction skills at the time they may be most needed. Overall, the median number of hours of annual school-based HIV instruction required by school districts ranged from two to four. The amount of time dedicated to HIV/AIDS instruction is generally insufficient for effectiveness.

The last concern is with respect to the preparation of teachers providing HIV instruction. CDC guidelines recommend that all school personnel, but especially those who teach about HIV, be provided adequate training. The survey discovered that about 66% of the districts instructed teachers in general about HIV/AIDS. The data also found that the most frequent method of preparing teachers to implement HIV/AIDS education involved merely providing written information or guidelines (Holtzman et.

al. 1992). Over 40% of the districts that required HIV education provided no inservice training, and even in those that did the median number of hours was an inadequate three. A full 10% reported that no teacher preparation whatsoever was provided for HIV education.

These findings raise important concerns and, at the same time, identify parallel areas of much needed improvement in the formulation and implementation of school-based HIV/AIDS education. Increasing the number of hours of HIV instruction is just one area in which HIV/AIDS education can be improved. This change must occur in tandem with an increase in the number of school districts which require HIV (and health) education, and in all cases HIV/AIDS education must be more prevalent at the upper grade levels. Additionally, the preparation of teachers expected to implement instruction must be improved dramatically, both in terms of quantity and quality.

Toward Effective HIV/AIDS Education

For the foreseeable future, educating students and changing their voluntary behaviors linked to HIV infection is the only "cure" for AIDS. Behaviors among sexually active adolescents such as inconsistent condom use, not using condoms at all, and having multiple sex partners are all associated with greater risk of exposure to HIV infection. It must be acknowledged also that other behaviors, such as drug and/or alcohol use, which result in greater sexual disinhibition compound the issue of behavior change. And, while each behavior individually increases the probability of HIV infection, they are very often reported in combination, further elevating the potential for risk.

In light of the institutional and attitudinal factors which affect HIV/AIDS education, policy formulation is the necessary first area of concern and certain fundamental premises stand out. In the process of establishing school-based HIV/AIDS education, policy makers initially must be cognizant of the ways in which demographic factors, such as age, ethnicity, and gender, are important correlates of sexual intercourse initiation. Data indicate, for example, that black teens are more likely to have had sex at a given age than whites; poorer youth, more likely to begin sexual activity at an earlier age than those better off (Newcomer and Baldwin 1992).

Sexual behavior change is accomplished within a broad psychosocial framework. This framework encompasses the setting in which sexual activity takes place, as well as the role of relationships and of social or peer norms in determining sexual interactions. At adolescence, the peer group can rival and even supplant the family as a source of social influence on a range of behaviors including sexuality. Accordingly, behavior in adolescents in general, as well as within peer groups to various degrees, can be interpreted as sharing a common theme: risk-taking.

Teenagers, typically lacking life experience, engage in potentially harmful activities without fully comprehending current or long term consequences. Upon recognizing the role that peer-induced risk-taking plays in adolescents' striving for social autonomy, the apparent irrationality of risk-taking can be redefined as goal-directed behavior, intended to achieve ends adolescents may perceive as essential for personal development.

An effective education program, then, is built around the peer group and its influence, and incorporates peer educators. Peer influences can be used successfully in materials to model preventive behaviors and to provide social endorsement for behavior change.

For individuals who perceive themselves as being at relatively low risk for HIV infection and who are initially ill-informed about the disease, knowledge of what constitutes risky behavior may motivate a change in behavior. And, data indicate that with adolescents there is room for improvement in the area of basic knowledge. But, Marshall Becker and Jill Joseph (1988) have suggested that there may be a threshold effect--a certain amount of information is necessary to initiate behavior change, but after that point, additional knowledge will not promote further change. Knowledge alone is not a reliable indicator of sustained behavior change.

There is precedent, however, for believing that behavior change can be accomplished and sustained. Some of the gay communities hardest hit by AIDS early on, such as in New York and San Francisco, have exhibited dramatic changes in behavior. One significant reason, though, for such marked behavior change was that the gay population recognized vulnerability to HIV infection. The same cannot be said about most adolescents, nor about much of the general population for that matter. Consequently, in light of the earlier statistics on adolescent sexual behavior, an effective HIV/AIDS education program must of necessity also incorporate and address the issue of perceived susceptibility, or more accurately the lack thereof in teenagers.

The perception that one is vulnerable to HIV infection is a predictor of one's future behavior. Perception of risk may be related to individuals' views of their partners; that is, the individual is confident that a "safe" sexual partner was chosen. And related to perceived susceptibility is perceived severity in that understanding the severity of AIDS is a significant indicator of both a decrease in risky sexual behavior and maintenance of low-risk behavior.

In addition to perceiving risk and severity, adolescents must also come to believe that they are capable of making behavior changes, that those changes will reduce their risk of infection, and that the benefits of doing so outweigh the costs. HIV educators must keep in mind that, in spite of their own beliefs about aspects of human sexuality, the behaviors important in HIV transmission may be marked by their centrality to the adolescent's sense of self-identity. Since there is little immediate reinforcement for undertaking behavior changes of this nature to reduce the risk of HIV infection, frank discussion of benefit-cost considerations must also occur, and within the context of peer expectations and support.

Understanding the factors that promote or prevent behavior change in adolescents is of course a prerequisite in formulating any effective program of education. Subsequently, more specific criteria can then be incorporated into HIV/AIDS education policy:

-- the information provided must be simple, unambiguous, and presented in a culturally sensitive manner

-- the behaviors to be modified must be specifically addressed

-- substitute behaviors, pleasures, and social activities must be presented

-- services must be available for those needing assistance in adopting the behavior changes

-- the values and norms that sanction continued high-risk behavior must be critically evaluated

-- there must be follow-up to ensure that appropriate behavior change has been adopted and maintained.

Implicit in the above criteria is the need to enlist the active involvement of parent and community groups, in terms of providing input and resources into the program and in supporting the goal as well as the methods to be employed.

In particular, for instance, since there is a clear need to rectify the inadequate training for those teachers expected to implement instruction, schools should not be hesitant to take advantage of community resources that exist. Many locales have HIV/AIDS information and support agencies which are willing to provide in-depth education programs for the entire school staff, and especially for those preparing instruction. County and state health units can refer school personnel to other available community and state resources as well.

As HIV/AIDS education policy is formulated and then implemented, care must be taken to incorporate sensitivity to cultural and religious issues. Though these issues can be extremely subtle, this is essential. At the same time, however, it is equally essential that HIV/AIDS be defined as a social and public health issue, not a religious one. The program is

ineffective at best if it permits the stigmatizing of any segment of the community.

Finally, HIV/AIDS education must be made relevant for minority culture students. In other words, policy makers and educators must be aware that there are cultural factors to be taken into consideration when formulating an HIV/AIDS education policy that will be effective for all students. It would be a miscalculation with fatal consequences to expect a program premised solely on the values of the dominant culture to benefit fully minority culture students. Group demographics must not be permitted to dictate individual destiny.

In 1990, African and Hispanic Americans represented over 20% of the total United States population, and overall projections indicate that the school-age population is becoming increasingly culturally diverse. CDC data suggest special urgency in implementing effective HIV/AIDS education to reach minority males and females. There is a resulting need to gauge the appropriateness and effectiveness of program content in terms of both cultural relevance and whether the attitudinal and behavioral changes being espoused are realistic for minority group students as well. It may be necessary to assess assumptions about the relative priority these students attach to various prevention strategies, such as total abstinence for example. And, there is a need to incorporate culturally-based differences in decision making. There are vast differences in circumstance between minority and non-minority students, and such differences have an impact on sexual behavior decisions. While minority group culture is not monolithic, and each student is an

individual whose personal experience may not be reflected in group experience, a few generalizations are useful.

Simply being labeled "minority" often carries negative connotations and stereotypes, regardless of whether we are speaking of racial, ethnic, or gender groups. Internalizing stereotypical images can lead to low self-esteem as well as potentially harmful behavior. In much the same way, gender role socialization within a group often defines acceptable or expected sexual behavior, as well as general views of masculinity and femininity. With a given individual, this may be evident in a willingness to take sexual risks.

It may be evident also in attitudes toward contraception and about HIV/AIDS. A religiously-based opposition to contraception in general would likely produce an unacceptance of condom usage which, in turn, might be reinforced by rigid sex-role definitions; that is, by what it means to be a "real man." With the early emphasis on homosexuals as the primary "risk group," African and Hispanic American youth perceived AIDS as a white gay male disease, and minority group reluctance to confront issues of HIV infection may have been exacerbated by a number of erroneous claims and social perceptions about AIDS and its relationship to African Americans and Africa.

Last, there are culturally-linked differences in expression and communication which must be taken into account. While the characteristics that comprise minority cultural style may be more prevalent among those in lower socioeconomic levels, the characteristics exist to some degree within the entire group (Kochman 1981). Anglo Americans tend to operate within an

analytical, structured, and cognitive framework; minorities, within a more relational, expressive, and affective one. The most effective educational materials, activities, and modes of presentation would be those that incorporate both.

Ir general, school-based HIV/AIDS education programs that merely provide information without also providing students the means for implementing behavior change are and will be extremely limited in effectiveness. Further, they must be culturally relevant and acknowledge and address the specific needs of varying groups of students. And, the introduction of interventions appropriate to the group will not be effective in sustaining long-term behavior change without the support of the larger community.

Summary

National surveys have indicated that most community members support a thorough discussion of HIV prevention in schools. Over 90% of parents believe that public schools should teach about HIV/AIDS, and more than 80% want their children to be taught about safer sex as a way of preventing HIV transmission (Gallup 1987). General community support for school-based HIV/AIDS education exists, and demographic information characterizing adolescent sexual behavior, HIV prevalence, and AIDS incidence indicates that this support is justified. But, although there may be a growing commitment to provide students with the knowledge and skills necessary in preventing HIV infection, that commitment is not matched, in all instances, by the scope of HIV/AIDS education, by the quality of materials used, by the time allotted for instruction, nor by the training provided those

educators implementing instruction.

In writing this essay my goals have been three-fold. First, this essay has attempted to chronicle the dynamic nature of the AIDS epidemic, an epidemic that is still relatively young in its development, and in so doing dispel remnants of the myth that this is primarily a problem for society's "fringe elements." The second goal was to establish the critical need for expanded HIV/AIDS education directed toward a student population which, contrary to the wishes of many, remains sexually active. Last, I have provided preliminary remarks regarding some necessary components and considerations in implementing a program that is both meaningful and realistic.

A significant segment of the adolescent population continues to report sexual activity that puts them at risk. In particular, the age of initiation of sexual activity, the proportion of students engaging in sexual activity, the number of lifetime sexual partners, the fact that many choose to avoid the use of condoms, and the high incidence of STDs all portend an increased potential for HIV infection. Community support may often advocate a particular moral or religious stance related to sexuality, and the school should be sensitive to those views. However, when formulating and implementing HIV/AIDS education, the school must stand firm for a comprehensive program based on student and public health needs. For any given individual, the stakes are high indeed.

In providing education that is culturally relevant, effective for all students, knowledge and decision-making skills in the context of HIV/AIDS must enable and encourage adolescents to

examine internal and external influences on their sexual choices. One of the more effective components of HIV/AIDS instruction is the incorporation of peer educators and peer role models who can legitimate and socially sanction behavior change. Enhanced self-esteem that accompanies peer-supported decision-making enables adolescents, then, to set their own boundaries for sexual behavior independent of the wishes of their partners. The nature of popular culture provides little basis for expecting a major reversal in the sexual activity patterns of adolescents. A compelling need does exist, and the school and educators must take a proactive stance, providing HIV/AIDS education that is grounded in the reality of young people's lives.

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